

ABSTRACT OF THE DISCLOSURE

An optically actuated transducer system includes an audio signal source, a light emitter driver circuit, a light emitter, optical delivery device, and a transducer unit. An audio signal is fed into the light emitter driver circuit. The audio signal is fed into the light emitter driver circuit. The output of the light emitter is connected to the optical delivery device. The transducer unit includes a speaker membrane and an absorber layer. The absorber layer is applied to a back of the speaker membrane. An end of the fiber optic cable is positioned such that it contacts the absorber layer. The optical delivery device may also be brought in substantially parallel to the speaker membrane by transferring the light through an optical beam steering system. The absorber layer absorbs light from the light emitter and converts the light to heat. The heat produces a temperature rise that leads to thermal expansion of the absorber layer which forces the speaker membrane to make a linear motion and produce an acoustic output.